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ERICSSON INC.
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EXAMINER

FARAGALLA, MICHAEL A

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/595,015

Applicant(s)

TORNKVIST ET AL.

Examiner

Michael Faragalla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This action is in response to Applicant's amendment filed on 11/27/2006. Claims **1-14** are still pending in the present application. This Action is made **FINAL**.

Claim objections

2. Amendments to the claims have been acknowledged, and therefore, the objection has been withdrawn.

Response to Arguments

3. Applicant's arguments filed on 11/27/2006 have been fully considered but they are not persuasive.

The argued features, i.e., a method for protecting the integrity of subscribers when positioning a mobile terminal via a location based service client in relation to said location based service client, in a communications system, comprising the steps of: assigning an alias identity for an entity initiating a positioning request and for a subscriber associated with said mobile terminal to be positioned, storing said alias identity for said entity and for said subscriber in association with a subscriber number of said entity and said subscriber respectively, receiving a positioning request from said location based service client for said subscriber said request including said alias identity for said subscriber, looking up the

number matching said alias identity for said subscriber, performing a positioning request for said mobile terminal in an associated network, and sending a response including location information received from said network and said alias identity to said location based service client reads upon Lammi et al as follows. Lammi et al is discussing generating an anonymous identifier and a user identifier, the equipment of service provider requests a location of a user with the anonymous identifier (figure 8). Therefore, Lammi et al teach the limitation of "assigning an alias identity for an entity initiating a positioning request and for a subscriber associated with said mobile terminal to be positioned". Lammi et al teach storing the identifiers in a database. Therefore, Lammi et al teach the limitation of "storing said alias identity for said entity and for said subscriber in association with a subscriber number of said entity and said subscriber respectively". Lammi et al teach requesting a location with the anonymous identifier from the equipment of the service provider. Therefore, Lammi et al teach the limitation of "receiving a positioning request from said location based service client for said subscriber said request including said alias identity for said subscriber". Lammi et al teach finding out the user identifier corresponding to the anonymous identifier. Therefore, Lammi et al teach the limitation of "looking up the number matching said alias identity for said subscriber". Lammi et al teach retrieving the geographical information of the mobile terminal, and returning the geographical information, service request and anonymous identifier to the equipment of the service provider. Therefore, Lammi et al teach the limitations of

performing a positioning request for said mobile terminal in an associated network, and sending a response including location information received from said network and said alias identity to said location based service client “.

With regard to applicant’s argument that Lammi et al lacks at least the limitation of protecting the identity of both the requesting subscriber and the target subscriber. That limitation is not in the claims. The only indication of “protecting the integrity of subscribers” is in the preamble. Further, the preamble mentions “protecting the integrity of subscribers” NOT “protecting the identity of both the requesting and the target subscriber”.

The references used are analogous; therefore they can be combined to form the basis of rejection under 35 U.S.C. 103.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims **1-3,6, 8-10 and 13** are rejected under 35 U.S.C. 102(b) as being anticipated by **LAMMI et al (WO 01/28273)**.

Consider **Claim 1**, Lammi et al clearly show and disclose a system for protecting the integrity of subscribers (read as terminal device) when positioning a mobile terminal via a location based service client, in relation to said location based service client a node (read as encrypting device) adapted to:

(a) Receive a request for an alias identity from an entity initiating a positioning request for a subscriber associated with said mobile terminal to be positioned (figure 2; page 8, lines 7-13); (according to Lammi et al, a service request is sent from the terminal device to the mobile communication network that forwards it to the service gateway. The service gateway sends a request to the encrypting device to give the anonymous identifier corresponding to the user identifier in question).

(b) Assign an alias identity (read as anonymous identifier) for said entity and for said subscriber (figure 2; page 8, lines 13-17).

(c) Store said alias identity for said entity and said subscriber in association with an identity of said entity and said subscriber respectively (figure 2; page 8, lines 13-17).

(d) Receive a positioning request from said location based service client (read as equipment of the service provider) for said subscriber, said request including said alias identity for said subscriber (figure 2; page 8, lines 22-29); (according to Lammi et al, a location request with the anonymous identifier is sent to the location register (step 27),

then at step 28 the location register sends a request to find out the identity to the encrypting device).

(e) Look up the subscriber number (read as user identifier) matching said alias identity for said subscriber (figure 2; page 8, lines 22-29); (according to Lammi et al, at step 29, the encrypting finds out the user identifier by using the anonymous identifier).

(f) Perform a positioning request for said mobile terminal in an associated network (figure 2; page 8, lines 25-31); (according to Lammi et al, the encryption device finds out the user identifier in question, and by means of the user identifier, the geographical information of the service user is found out at step 31 using the location register).

(g) Send a response including location information received from said network and alias identity to said location based service client (figure 2; page 8, line 37; page 9, lines 1-3); (according to Lammi et al, at step 32, the geographical information is sent to the equipment of the service provider).

Consider **Claim 2**, Lammi et al clearly show and disclose the system according to claim 1, which further comprises:

A service control point (read as service gateway) adapted to:

(a) Receive a request for an alias identity for said entity and said subscriber from a mobile switching centre (figure 2; page 8, lines 7-10); (according to Lammi et al, at step 22, the mobile communication network sends a service request to the service gateway. Since the system taught by Lammi et al is a GSM system (page 8, lines 2-5), the mobile

Communication network that sends the service request to the service gateway must include a Mobile switching Centre).

(b) Forward said request for an alias identity to said node (encrypting device) to retrieve said alias identity for said entity and said subscriber (figure 2; page 8, lines 7-13).

(c) Send a response including said alias identity for said entity and said subscriber to said mobile switching center (figure 2; page 9, lines 3-13); (Since the system taught by Lammi et al is a GSM system (page 8, lines 2-5), the mobile Communication network that sends the service request to the service gateway must include a Mobile switching Centre).

Consider **Claim 3**, Lammi et al clearly show and disclose the system according to claim 2, wherein said mobile switching centre is adapted to forward the positioning request from said entity with said alias identity for said entity and said subscriber to said location based service client (read as equipment of the service provider); (figure 2; page 8, lines 7-22).

Consider **Claim 6**, Lammi et al clearly show and disclose the system according to claim 1 wherein said entity is a subscriber (read as service user) (page 8, lines 2-5).

Consider **Claim 8**, Lammi et al clearly show and disclose a method for protecting the integrity of subscribers (read as terminal device) when positioning a mobile terminal via

a location based service client, in relation to said location based service client, in a communication system comprising the steps of:

- (a) Assigning an alias identity for an entity for an entity initiating a positioning request and a subscriber associated with said mobile terminal to be positioned (figure 2; page 8, lines 13-17).
- (b) Storing said alias identity for said entity or for said subscriber in association with a subscriber number of said entity and said subscriber respectively (figure 2; page 8, lines 13-17).
- (c) Receiving a positioning request from said location based service client for said subscriber, said request including said alias identity for said subscriber (figure 2; page 8, lines 22-29).
- (d) Looking up the number matching said alias identity for said subscriber (figure 2; page 8, lines 22-29); (according to Lammi et al, at step 29, the encrypting finds out the user identifier by using the anonymous identifier).
- (e) Performing a positioning request for said mobile terminal in an associated network (figure 2; page 8, lines 25-31); (according to Lammi et al, the encryption device finds out the user identifier in question, and by means of the user identifier, the geographical information of the service user is found out at step 31 using the location register).
- (f) Sending a response including location information received from said network and alias identity to said location based service client (figure 2; page 8, line 37; page 9, lines 1-3); (according to Lammi et al, at step 32, the geographical information is sent to the equipment of the service provider).

Consider **Claim 9**, Lammi et al clearly show and disclose the method according to claim 8, further comprising the steps of:

(a) At a service control point, receiving a request for an alias identity for said entity and said subscriber from a mobile switching centre (figure 2; page 8, lines 7-10); (according to Lammi et al, at step 22, the mobile communication network sends a service request to the service gateway. Since the system taught by Lammi et al is a GSM system (page 8, lines 2-5), the mobile Communication network that sends the service request to the service gateway must include a Mobile switching Centre).

(b) Forwarding said request for an alias identity to said gateway mobile location centre to retrieve said alias identity for said entity and said subscriber (figure 2; page 8, lines 7-13).

(c) Sending a response including said alias identity for said entity and said subscriber to said mobile switching center (figure 2; page 9, lines 3-13); (Since the system taught by Lammi et al is a GSM system (page 8, lines 2-5), the mobile Communication network that sends the service request to the service gateway must include a Mobile switching Centre).

Consider **Claim 10**, Lammi et al clearly show and disclose the method according to claim 9, further comprising the step of:

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From said mobile switching centre, forwarding the positioning request from said entity with said alias identity for said entity and said subscriber to said location based service client (read as equipment of the service provider); (figure 2; page 8, lines 7-22).

Consider **Claim 13**, Lammi et al clearly show and disclose the method according to claim 8 wherein said entity is a subscriber (read as service user) (page 8, lines 2-5).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims **4 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **LAMMI et al (WO 01/28273)** in view of **Olrik et al (US publication number: 2003/0125042)**.

Consider **Claim 4**, Lammi et al clearly show and disclose the system according to claim 3, wherein said mobile switching centre is adapted to forward said positioning request from said entity to said location based service client via an SMS-Centre (figure 2; page 8, lines 7-13; page 7, lines 24-27).

However, Lammi et al do not specifically show that said positioning request from said entity is an SMS message.

In related art, Olrik et al show that said positioning request from said entity (read as mobile station) is an SMS message (abstract; paragraph 6, lines 4-8).

Therefore it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Olrik et al into the teaching of Lammi

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et al in order for the network not to have to pre-register the mobile station for the location information service (abstract, lines 10-13).

Consider **Claim 11**, Lammi et al clearly show and disclose the method according to claim 10, wherein said positioning request from said entity is forwarded to said location based service client via an SMS-Centre (figure 2; page 8, lines 7-13; page 7, lines 24-27).

However, Lammi et al do not specifically show that said positioning request from said entity is an SMS message.

In related art, Olrik et al show that said positioning request from said entity (read as mobile station) is an SMS message (abstract; paragraph 6, lines 4-8).

Therefore it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Olrik et al into the teaching of Lammi et al in order for the network not to have to pre-register the mobile station for the location information service (abstract, lines 10-13).

10. Claims **5 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over **LAMMI et al (WO 01/28273)** in view of **Baba et al (patent number: JPO2003078632)**.

Consider **Claim 5**, Lammi et al clearly show and disclose the method according to claim 3, wherein said mobile switching centre is adapted to forward said positioning request

from said entity to said location based service client (read as equipment of the service provider); (figure 2; page 8, lines 7-22).

However, Lammi et al do not show that said positioning request from said entity is a voice call and that said positioning request from said entity is forwarded to said location based service client via a call centre or IVR.

In related art, Baba et al show that said positioning request from said entity is a voice call and the positioning request is forwarded to said location based service client via a call centre or IVR (abstract); (according to Baba et al, the emergency call is forwarded to a call center. Therefore, the request which in this case is an emergency call can be forwarded to the to the location based service client which is read according to the primary reference as equipment of the service provider).

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Baba et al into the teaching of Lammi et al in order to perform GPS positioning by remote operation from an emergency call center (abstract).

Consider **Claim 12**, Lammi et al clearly show and disclose the method according to claim 10, but fails to specifically show that said positioning request from said entity is a voice call and that said positioning request from said entity is forwarded to said location based service client via a call centre or IVR.

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In related art, Baba et al show that said positioning request from said entity is a voice call and the positioning request is forwarded to said location based service client via a call centre or IVR (abstract); (according to Baba et al, the emergency call is forwarded to a call center. Therefore, the request which in this case is an emergency call can be forwarded to the to the location based service client which is read according to the primary reference as equipment of the service provider).

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Baba et al into the teaching of Lammi et al in order to perform GPS positioning by remote operation from an emergency call center (abstract).

11. Claims **7 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **LAMMI et al (WO 01/28273)** in view of **Kim et al (US publication number: 2002/0083198)**.

Consider **Claim 7**, Lammi et al clearly show and disclose the system according to claim 1, but fails to specifically show that said alias identity is an E.164 number. However, in related art, according Kim et al, phone numbers of subscribers are given an E.164 format in response to a request for a telephone number that the ipv6 protocol engine calls.

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Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Kim et al into the teaching of Lammi et al in order to accommodate all the various services in the internet (Kim et al, paragraph 6, lines 8-11).

Consider **Claim 14**, Lammi et al clearly show and disclose the system according to claim 8, but fails to specifically show that said alias identity is an E.164 number.

However, in related art, according Kim et al, phone numbers of subscribers are given an E.164 format in response to a request for a telephone number that the ipv6 protocol engine calls.

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Kim et al into the teaching of Lammi et al in order to accommodate all the various services in the internet (Kim et al, paragraph 6, lines 8-11).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Faragalla whose telephone number is (571) 270-1107. The examiner can normally be reached on Mon-Fri 7:30 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Faragalla

02/20/2007

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